

# **Organic Galactooligosaccharide Powder**



### What is Organic Galactooligosaccharide Powder?

**Organic Galactooligosaccharide (GOS) Powder** is meticulously produced through a proprietary enzymatic process using 100% pure, organically certified lactose, typically derived from organic dairy. This process transforms lactose into short-chain carbohydrates known as galactooligosaccharides, which are indigestible by human enzymes but serve as a preferential food source for beneficial bacteria (such as *Bifidobacteria* and *Lactobacilli*) in the colon. The resulting liquid is then purified, concentrated, and gently dried into a fine, free-flowing powder. The organic certification ensures that the raw materials are cultivated and processed without synthetic pesticides, herbicides, GMOs, or artificial additives, aligning with strict clean-label and natural ingredient standards.

GOS is distinguished as a highly effective **prebiotic fiber** due to its specific fermentation by beneficial gut flora, leading to the production of short-chain fatty acids (SCFAs) like butyrate, which are vital for gut barrier integrity and overall metabolic health. Its mild, slightly sweet taste and excellent solubility make it highly versatile for integration into a wide array of functional products without compromising sensory profiles. Our **Organic GOS Powder** is the ideal choice for manufacturers seeking to deliver targeted digestive health benefits with a clean and transparent ingredient.

## **Specification**

Attribute	Details
Common Names	Organic GOS Powder, Organic Oligosaccharide, Organic Galactooligosaccharide
Source	100% Organic Lactose (typically from organic dairy)
Processing	Enzymatic conversion of lactose to GOS, purification, drying
GOS Content	Typically $\geq$ 55% (on dry basis), customizable options available
Appearance	Fine, white to off-white, free-flowing powder
Flavor	Mildly sweet, neutral
Solubility	Excellent, highly soluble in water
Moisture Content	Max 6%
pH (10% solution)	6.0-7.0
Microbiological Purity	Meets international food safety standards (e.g., E. coli, Salmonella absent, low total plate count)
Heavy Metals	Low levels, compliant with international regulations
Key Characteristics	Prebiotic fiber, supports beneficial gut flora, enhances nutrient absorption, immune modulator, organic, clean label
Allergen Information	Contains lactose (dairy-derived). Lactose content is significantly reduced but not entirely absent.

# Health Benefits:

- 1. **Supports Digestive Health**: GOS acts as a prebiotic, selectively stimulating the growth of beneficial gut bacteria, which in turn supports overall gut function, digestion, and regularity.
- 2. **Boosts Immune Function**: As a prebiotic, GOS helps enhance gut health, which plays a critical role in immune system function, potentially reducing the risk of infections and diseases.



- 3. **Improves Stool Regularity**: GOS has been shown to increase stool frequency and improve consistency, helping prevent constipation and support healthy bowel movements.
- 4. **Enhances Mineral Absorption**: GOS helps improve the bioavailability of important minerals like calcium and magnesium, which are essential for bone and muscle health.
- 5. **Promotes Healthy Gut Microbiota**: By promoting the growth of beneficial bacteria such as *Bifidobacteria*, GOS helps maintain a healthy balance of the gut microbiome, supporting overall health and wellness.
- 6. **May Support Weight Management**: GOS can help with weight management by increasing satiety and promoting the growth of beneficial gut bacteria that influence metabolism.

# Applications

Our **Organic Galactooligosaccharide (GOS) Powder** is an incredibly valuable and in-demand ingredient for a multitude of B2B applications across the nutraceutical, food, and beverage industries:

#### Infant Formula & Young Children's Foods:

• Widely used to mimic the prebiotic effects of human milk oligosaccharides (HMOs), supporting healthy gut development and immune function in infants and toddlers.

#### • Functional Dairy & Dairy Alternatives:

• Incorporated into yogurts, fermented milks, plant-based milks, and cheeses to enhance their prebiotic properties and support digestive health.

#### • Nutraceuticals & Dietary Supplements:

• Key ingredient in gut health supplements (capsules, powders, gummies), multi-fiber blends, and products targeting digestive wellness.

#### • Functional Beverages:

• Added to probiotic drinks, functional waters, smoothie mixes, and health-focused powdered beverages for a prebiotic boost.

#### • Baked Goods & Cereals:

- Used to fortify breads, biscuits, breakfast cereals, and snack bars with beneficial fiber while maintaining texture and taste.
- Confectionery & Sweets:



• Incorporated into functional candies, gummies, and chocolates to offer a gut-health benefit.

### Why Choose Our Organic GOS Powder for Your Business?

Partnering with us for your **Organic Galactooligosaccharide (GOS) Powder** needs ensures a cutting-edge, high-demand ingredient that addresses critical consumer health trends:

**Comprehensive Technical Support:** Our team provides detailed data sheets, Certificates of Analysis (CoAs), and expert guidance to support your product development, labeling, and regulatory compliance needs.

**Certified Organic & Clean Label:** Our GOS is rigorously certified organic, providing the transparency and purity consumers demand in today's market.

**Proven Prebiotic Efficacy:** Backed by extensive research, GOS is a recognized and effective prebiotic, giving your products a strong scientific foundation.

**Superior Functionality:** Its excellent solubility and neutral flavor profile make it exceptionally easy to integrate into a wide range of formulations without sensory challenges.

**Consistent Quality & Purity:** Our meticulous production processes and stringent quality control guarantee a reliable, pure, and safe product batch after batch, meeting the highest international food safety standards.

**Robust & Scalable Supply Chain:** As a dedicated B2B supplier, we offer dependable sourcing and the capacity to meet your production demands, from small to bulk orders, efficiently and consistently.

### FAQs

# Q: What is the source of your Organic Galactooligosaccharide (GOS)

#### Powder?

A: Our **Organic GOS Powder** is derived from **organic lactose**, typically sourced from organic dairy. This ensures a clean and sustainably produced prebiotic.

#### **Q:** Is Organic GOS suitable for lactose-intolerant individuals?

A: While derived from lactose, the enzymatic conversion process significantly reduces the lactose content. However, trace amounts of lactose may remain. For severe lactose intolerance or dairy allergies, we recommend conducting specific tests or clearly stating the dairy origin.



# Q: What is the typical shelf life and recommended storage for bulk quantities?

A: Our **Organic GOS Powder** typically has a shelf life of **24 months** from the manufacturing date when stored in a cool, dry place, away from direct sunlight and moisture, in its original sealed, airtight packaging.

#### Q: What makes GOS a "prebiotic"?

A: GOS is classified as a prebiotic because it is a non-digestible food ingredient that selectively stimulates the growth and activity of beneficial bacteria in the colon, thereby improving host health. It specifically nourishes beneficial strains like *Bifidobacteria*.

#### Q: Can Organic GOS Powder be used in infant formulas?

A: Yes, GOS is one of the most widely used prebiotics in infant formulas globally due to its welldocumented benefits in supporting gut microbiota development similar to breast milk.

# Packing

